Project Design Phase-I
Proposed Solution

Date	24 September 2022
Team ID	PNT2022TMID00425
Project Name	Project – Car Resale Value Prediction
Maximum Marks	2 Marks

Proposed Solution Template:

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	Accurately predict a used car's price based on its features, to make informed purchases.
2.	Idea / Solution description	To predict the resale value of the car, we proposed an intelligent, flexible, and effective system that is based on using regression algorithms. Considering the main factors which would affect the resale value of a vehicle a regression model is to be built that would give the nearest resale value of the vehicle. We will be using various regression algorithms and algorithms with the best accuracy will be taken as a solution, then it will be integrated into the web-based application where the user is notified of the status of his/her product.
3.	Novelty / Uniqueness	This project proposed a scalable framework for used car price prediction using data mining and machine learning approaches. An efficient machine-learning model is built by training, testing, and evaluating five machine-learning regressors. The results of our tests were quantified in terms of the R2 score of our predictions. The R2 score is a statistical measure of how close the data are to the fitted regression line.
4.	Social Impact / Customer Satisfaction	People can predict the price of used cars with better accuracy. They can provide their preferred features into consideration with the help of a user-friendly interface.
5.	Business Model (Revenue Model)	It is cost-free as it is a Software as Service Platform. People need not spend money to detect the car's resale value.
6.	Scalability of the Solution	Better execution in accuracy, sensitivity, and specificity as well as in system design flexibility.